



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0038; Directorate Identifier 2013-SW-023-AD]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters (Type Certificate previously held by Eurocopter France)

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for Airbus Model EC225LP helicopters. This proposed AD would require repetitive visual and tap test inspections of each main rotor blade (blade) leading edge stainless steel protective strip (strip) for a crack, cut, or blind or open debonding (debonding), and taking approved corrective measures. If there is a crack or if there is debonding that exceeds acceptable limits, this AD would require, before further flight, repairing or replacing the blade with an airworthy part. This proposed AD is prompted by suspected water seepage through a crack in the blade strip resulting in significant debonding. The proposed actions are intended to prevent loss of the blade strip, excessive vibrations induced by blade weight imbalance, and subsequent loss of control of the helicopter.

DATES: We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Docket: Go to <http://www.regulations.gov>. Follow the online instructions for sending your comments electronically.
- Fax: 202-493-2251.
- Mail: Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.
- Hand Delivery: Deliver to the “Mail” address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the foreign authority’s AD, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this proposed AD, contact Airbus Helicopters, Inc., 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.airbushelicopters.com/techpub>. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

FOR FURTHER INFORMATION CONTACT: Gary Roach, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email gary.b.roach@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, we will consider all comments we receive on or before the closing date for comments. We will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. We may change this proposal in light of the comments we receive.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, issued EASA AD No. 2013-0103, dated May 2, 2013, which supersedes EASA AD No. 2007-0180-E, dated June 29, 2007, to

correct an unsafe condition for the Eurocopter Model EC225LP helicopters with certain blades installed. EASA advises that an investigation of significant debonding of a blade strip revealed rapidly progressing debonding caused by water seepage through a crack in the blade strip. EASA AD No. 2007-0180-E required repetitive inspections of the blade strip and accomplishing any corrective actions. After issuance of EASA AD No. 2007-0180-E, Eurocopter developed a modified strip and re-identified blade part numbers with the modified strip. Because these other blades with the modified strip are still susceptible to debonding, EASA issued superseding AD 2013-0103 to extend the applicability to the new part-numbered blades.

FAA's Determination

This helicopter has been approved by the aviation authority of France and is approved for operation in the United States. Pursuant to our bilateral agreement with France, EASA, its technical representative, has notified us of the unsafe condition described in the EASA AD. We are proposing this AD because we evaluated all known relevant information and determined that an unsafe condition is likely to exist or develop on other helicopters of the same type design.

Related Service Information

Eurocopter issued an Emergency Alert Service Bulletin (EASB) No. 05A010, Revision 2, dated April 22, 2013, for the Model EC225LP helicopter and for the non-FAA typed certificated Model EC725AP military helicopter. The EASB specifies a visual check and tapping test of the bonding of the strip on the leading edge of the blades for cracks, cuts, and debonding and taking corrective actions as applicable. Revision 1 to the EASB changed the visual check and the tapping test so that they can be performed

without removing the blades. Revision 2 extended the applicability to additional part-numbered blades with a modified strip installed.

Proposed AD Requirements

This proposed AD would require:

- Within 15 hours time-in-service (TIS) and thereafter at intervals not to exceed 85 hours TIS, visually and tap test inspecting each blade strip for a crack, a cut, or open or blind debonding. For purposes of this proposed AD, open debonding, also known as edge bond separation, occurs when a bonded part becomes unattached (debonded) leaving the surface under it exposed to open air around the periphery of the part. Blind debonding occurs when a bonded part becomes unattached internally yet remains bonded around its entire periphery.

- If there is debonding beyond acceptable limits or located outside a specific area, or if there is a crack, before further flight, repairing or replacing the blade.

- If there is a cut in the blade root polyurethane protective strip, tap test inspecting the area. If there is no debonding, tap test inspecting the blade strip every 15 hours TIS. If there is debonding beyond acceptable limits or located outside a specific area, before further flight, repairing or replacing the blade.

Differences Between this Proposed AD and the EASA AD

If there is a crack in the blade leading edge, this proposed AD would require repairing or replacing the blade before further flight, while the EASA AD permits a re-inspection within 15 hours TIS.

Costs of Compliance

We estimate that this proposed AD would affect 4 helicopters of U.S. Registry. We estimate that operators may incur the following costs in order to comply with this AD. Labor costs are estimated at \$85 per work hour. We estimate 4 work hours to inspect the helicopter for a total of \$340 per helicopter and \$1,360 for the U.S. operator fleet per inspection cycle. If necessary, it would take 4 work hours to repair the blade and \$600 for required parts for a total of \$940 per helicopter. It would take about 5 work hours to replace a blade at a cost of \$425 for labor. Parts would cost \$315,495 to replace P/N 332A11-0050-01 and \$403,650 to replace P/N 332A11-0055-00, for a total cost of \$315,920 and \$404,075, respectively.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify this proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Airbus Helicopters (Type Certificate previously held by Eurocopter France): Docket No. FAA-2014-0038; Directorate Identifier 2013-SW-023-AD.

(a) Applicability

This AD applies to Model EC225LP helicopters with a main rotor blade (blade), part number (P/N) 332A11.0050.00, 332A11.0055.00, 332A11.0050.02, or 332A11.0055.02, installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as loss of a blade stainless steel protective strip (strip), which could result in excessive vibrations induced by blade weight imbalance and subsequent loss of control of the helicopter.

(c) Comments Due Date

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(e) Required Actions

Within 15 hours time-in-service (TIS) and thereafter at intervals not to exceed 85 hours TIS, visually and tap test inspect each blade strip for a crack, a cut, or open and

blind debonding. For purposes of this AD, open debonding, also known as edge bond separation, occurs when a bonded part becomes unattached (debonded) leaving the surface under it exposed to open air around the periphery of the part. Blind debonding occurs when a bonded part becomes unattached internally yet remains bonded around its entire periphery.

(1) If there is open or blind debonding within acceptable limits and the debonded area is located inside Area D of Figure 1 of Eurocopter Emergency Alert Service Bulletin No. 05A010, Revision 2, dated April 22, 2013 (EASB), no further action is required until the next inspection.

(2) If there is open or blind debonding and the debonded area is located outside Area D of Figure 1 of the EASB, before further flight, repair or replace the blade.

(3) If there is open or blind debonding beyond acceptable limits, before further flight, repair or replace the blade.

(4) If there is a cut in the blade root polyurethane protective strip as depicted in Area A of Figure 2 of the EASB, tap test inspect the area.

(i) If there is no open and blind debonding, at intervals not to exceed 15 hours TIS, tap test inspect the blade strip in the blade root area, in the stainless steel leading edge/neoprene junction area for open or blind debonding.

(ii) If there is open or blind debonding within acceptable limits and the debonded area is located inside Area D of Figure 1 of the EASB, no further action is required until the next inspection.

(iii) If there is open or blind and the debonded area is located outside Area D of Figure 1 of the EASB, before further flight, repair or replace the blade.

(iv) If there is open or blind debonding beyond acceptable limits, before further flight, repair or replace the blade.

(5) If there is a crack, before further flight, repair or replace the blade.

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Gary Roach, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email gary.b.roach@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

(g) Additional Information

The subject of this AD is addressed in European Aviation Safety Agency (EASA) AD No. 2013-0103, dated May 2, 2013. You may view the EASA AD on the Internet in the AD Docket at www.regulations.gov.

(h) Subject

Joint Aircraft Service Component (JASC) Code: 6210 Main Rotor Blades.

Issued in Fort Worth, Texas, on January 16, 2014.

Lance T. Gant,

Acting Directorate Manager, Rotorcraft Directorate,
Aircraft Certification Service.

[FR Doc. 2014-01951 Filed 01/30/2014 at 8:45 am; Publication Date: 01/31/2014]